

**Notice of Allowability**

Application No.

09/627,190

Examiner

Lawrence B Williams

Applicant(s)

ADIREDDY ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 8 February 2006.
2. ☒ The allowed claim(s) is/are 1, 4, 6-9, 12-17, 19-25, renumbered as 1, 2, 3-6, 7-12, 13-19, respectively.
3. ☒ The drawings filed on 27 July 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The instant application discloses a transmitter and receiver for transmitting and receiving a stream of known and unknown symbols through a transmission channel. A search of prior art records has failed to disclose a transmitter "wherein said known symbol distribution controller is capable of determining a channel order,  $L$ , associated with the receiver; said transmitted stream of known symbols and unknown symbols is received by a plurality of receivers; the known symbol distribution controller is capable of **determining a plurality of channel orders,  $L_1$  through  $L_n$** , each channel order being associated with a corresponding one of said plurality of receivers; and said known symbol distribution controller **determines the optimum distribution according to a value of the channel order**" as disclosed in claim 1.

Nor does the prior art disclose a network comprising: "a transmitter for transmitting a stream of known symbols and unknown symbols and unknown symbols through a transmission channel to a first receiver, wherein the transmitter comprises a known symbol distribution controller capable of inserting a plurality of known symbol clusters into an outgoing stream of unknown symbols **in an optimum distribution** in order to improve the performance of a receiver, wherein said known symbol distribution controller is **capable of determining a channel order,  $L$ , associated with the first receiver, and wherein said known symbol distribution controller determines the optimum distribution according to a value of the channel order**" as disclosed in claim 9.

Nor does the prior art teach a method transmitting a plurality of known symbols and unknown symbols comprising the steps of: "inserting a plurality of known symbol clusters into

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an outgoing stream of unknown symbols in an optimum distribution capable of improving the performance of a first one of the receivers; transmitting the stream of known symbols and unknown symbols according to the optimum distribution; determining a plurality of channel orders,  $L_1$  through  $L_n$ , wherein each channel order is associated with a corresponding one of said plurality of receivers; and determining a maximum one of the plurality of channel orders” as disclosed in claim 17.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

## CONCLUSION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

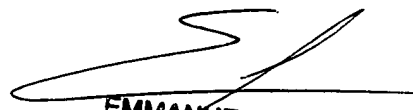
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw

February 24, 2006

  
EMMANUEL BAYARD  
PRIMARY EXAMINER